

REMARKS AND ARGUMENTS

Claims 1-6 and 8-10 are pending in the present application. No claims are being amended or canceled herein.

The claims were rejected under 35 U.S.C. § 103(a) over Meitzner et al. ("Meitzner"). Applicants respectfully traverse this rejection.

Applicants have argued in their previous response that Meitzner teaches away because it states that crosslinker may vary "within the scope of" the invention, i.e., amounts from 4 to 25%, substantially higher than the presently claimed range. The final Office Action rejects this contention and argues that Meitzner not only does not teach away, but actually suggests the present invention. The only support offered in the final Office Action for this position takes the form of very general statements from Meitzner regarding changes in polymer properties with changes in individual parameters. More than this is required to establish a *prima facie* case of obviousness.

A finding of obviousness under 35 U.S.C. § 103(a) requires that the reference must suggest the desirability of the particular modifications needed to arrive at the claimed invention. *See* M.P.E.P. § 2143.01; *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). The Office Action cites statements in Meitzner that: (i) crosslinker "has a profound effect on the physical properties of the product;" and (ii) low degree of crosslinking is associated with high swelling. Disclosure that varying crosslinking will result in a change in properties hardly amounts to a suggestion of the present set of claim limitations, which include the specific range "from 0.5 mole percent to 2 mole percent crosslinker," along with other limitations, e.g., "diameter no greater than 200  $\mu\text{m}$ ," "no void spaces having a diameter greater than 5  $\mu\text{m}$ ," etc. For example, Meitzner contains no guidance as to the optimum ranges of crosslinker that will achieve the beads claimed by Applicants; rather, the disclosure is at most (if one ignores that it teaches away – see discussion *infra*) an invitation to experiment with crosslinker level. The notion that obviousness can result from leaving those skilled in the art to find the claimed invention via undirected experimentation, i.e., that it would be "obvious to try" the claimed parameters, has been rejected repeatedly by the Federal Circuit. *See, e.g., In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Moreover, there is no suggestion in Meitzner to lower crosslinker while also removing the large amounts of "precipitant" (solvent) employed by Meitzner. The Office Action first states that the "[e]ffects of using and/or omitting the porogen are explicitly discussed" (emphasis in original) at column 4, line 61 to column 5, line 23. The cited passage is merely a discussion of the mechanism by which precipitant creates microscopic channels in the polymer. The Office Action then cites results from Meitzner in which using no precipitant leads to higher density. However,

these results were obtained using 20% crosslinker (Table II, first entry). The Office Action then concludes that "omitting porogen would have been obvious in order to obtain a polymer with no microchannels and with higher density." Assuming, *arguendo*, that Meitzner teaches preparation of a bead without precipitant, the only example of this is one in which 20% crosslinker was used. There is no suggestion anywhere in Meitzner to vary both crosslinker and precipitant levels in combination to prepare a bead having low levels of both. "It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." *In re Wesslau*, 353 F.2d 238, 241 (C.C.P.A. 1965).

Finally, not only is there is no suggestion to modify the disclosure of Meitzner in the direction of the present invention, but Meitzner actually teaches away from the present invention. Meitzner is directed to preparation of beads having large pore spaces (macroreticular structure) by incorporating large amounts of "precipitant" (solvent) and a high level of crosslinker. What Meitzner "fairly suggests to one of ordinary skill in the art" is that, in the presence of high levels of crosslinker, precipitant can be added to create microchannels and lower density. *Id.* Applicants have discussed previously the requirement in Meitzner that crosslinker levels be at least 4%. This teaches use of much higher crosslinker levels than recited in Applicants' claims. The general disclosure cited in the Office Action that crosslinker levels affect polymer properties does not negate Meitzner's specific statement requiring high crosslinker levels. Meitzner strongly suggests to one skilled in the art the importance of high crosslinker levels, and hence Meitzner teaches away from use of lower levels, such as those claimed by Applicants.

An additional requirement for a *prima facie* case of obviousness is a reasonable expectation of success in light of the prior art. *See* M.P.E.P. § 2143.02; *In re Dow Chemical*, 837 F.2d 469 (Fed. Cir. 1988). Since, as discussed above, Meitzner contains no guidance as to how to vary the relevant parameters to arrive at the claimed invention, it cannot possibly provide any reasonable expectation of success. Moreover, Applicants claim beads with no void spaces having a diameter greater than 5  $\mu\text{m}$ . Meitzner (Col. 5, lines 6-8) distinguishes the microchannels produced by precipitant "from the micropores which are present in all crosslinked polymers." Thus, Meitzner does not even recognize the possibility of making polymer beads substantially free of micropores (void spaces). The Office Action asserts that it would have been obvious "to obtain a polymer with no microchannels and higher density." Regardless of whether this is so, Meitzner teaches that micropores "are present in all crosslinked polymers" (emphasis added). One skilled in the art certainly could not acquire a reasonable expectation of eliminating micropores larger than 5  $\mu\text{m}$  from this teaching, but would learn only that the occurrence of microchannels could be controlled, but that micropores are not affected by altering any of the relevant parameters. Therefore, Meitzner cannot render the present invention obvious.

Moreover, Applicants submitted previously the Declaration of Dr. James C. Bohling, which demonstrates improved properties of beads made according to the present invention which could not have been predicted from Meitzner. This has been discussed fully in Applicants' previous response. For this reason as well, Applicants believe that the present claims are patentable, and respectfully request that the rejection be withdrawn and the application allowed.

If the Examiner has any further objections to the application, Applicants respectfully request that the Examiner contact Applicants' undersigned attorney by telephone at (847) 649-3891 to discuss the remaining issues.

Respectfully submitted,



Kenneth Crimaldi  
Attorney for Applicant  
Registration No. 40,968  
Telephone No.: (847) 649-3891

Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, PA 19106-2399  
April 11, 2005